## **Subject:** Application for Software Development Engineer Intern (Full Stack & AI)

Dear Hiring Manager,

I am a final-year Computer Science Engineering student at the National School of Computer Science (ENSI), passionate about software engineering and deeply motivated by the opportunity to work at the intersection of full-stack development and artificial intelligence.

What drives me most is curiosity — the need to understand how systems truly work and to translate that understanding into high-quality, efficient solutions. This mindset has guided me through various projects, from developing a project management tool that visualizes task dependencies using topological sorting algorithms and graph theory, to building database systems where I explored serialization, indexing, and B+ Tree structures to optimize performance and storage efficiency.

These experiences strengthened my technical expertise in React, TypeScript, Next.js, NestJS, and PostgreSQL, and taught me the importance of designing scalable architectures while maintaining clean and maintainable code.

I am particularly drawn to this internship because it offers the opportunity to combine AI with robust software engineering practices while learning from experienced mentors. I thrive in environments that challenge me to think critically, explore new technologies, and continuously improve both my technical and problem-solving skills.

I am eager to contribute to your team's projects and grow within a culture that values innovation, learning, and technical excellence. Thank you for considering my application.

Best regards, Ahmed Trabelsi